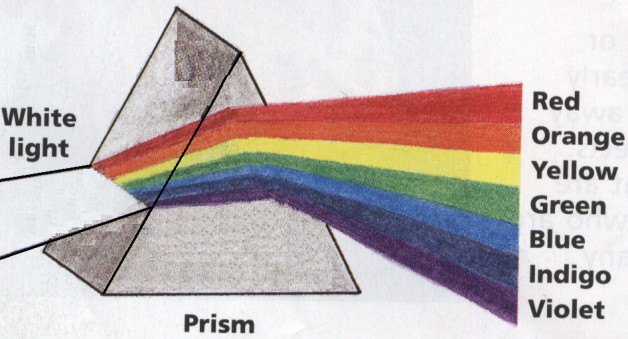
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|  | **Physics** | **شعار-القسم** |
| **Colors** |
| Worksheet-9- |

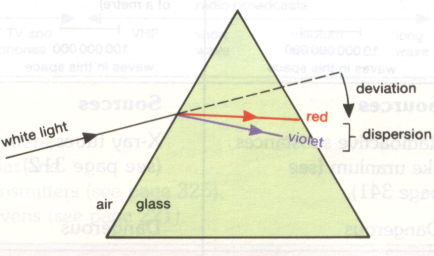
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| Name: Class: 8 /……........ | |
| Book pages: | |
|  | Date: 23 -5-2012 |
| 8-18.8-8.18.9-8.18.10-8.18.11 | Core Standard number |
| 1.Demonstrate that white light is made up of different colors.  2.explain rainbow  3. Know that objects appear coloured when viewed in white light because some colours are reflected by the object but others are absorbed  4. Know the effect of superimposing red, green and blue colour filters  5. Know that red, green and blue light, when superimposed, create white light and apply this knowledge to television screens and to colour vision.  6. Know that red–green colour-blindness is common among males | Learning Objectives  Logo + text 2 |

**A- Dispersion of light**

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1- Complete the following**:**

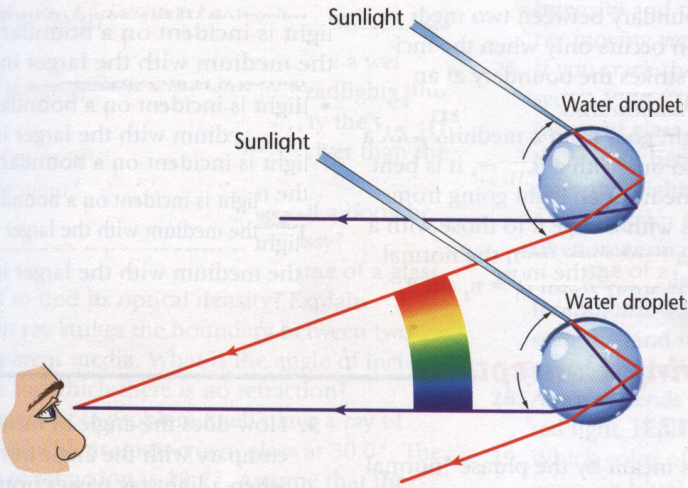
1. When the white light passed through the prism it ……………………. into seven different colors called ……………………..
2. White light is really a ……………….. of several colors.
3. The separation of the light into its spectrum is called ……………………….
4. The colors of the visible spectrum, in order, are .......................................………………………

………………………………………………………………………………………………………….

2- Which color among red and blue is the most refracted?

…………………………………………………………………

…………………………………………………………………

3- The rainbow is considered as example of Dispersion.

1. When does rainbow occur?

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………………………………………………………

1. How does rainbow occur in the sky?

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**B- Colors**

1. A yellow object appears yellow when it is exposed to a white color and appears black when it is exposed to blue color. Explain Why.

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……………………………………………………………………………………………………….

1. Complete the following: When white light shines on red object, the object ……………….. all colors of the white light except the ……………………. which is left to be reflected to our eyes and so the object appears ……………………..
2. What do you see if white light passes through green filter and blue filter, or blue filter and red filter, or red filter and green filter?

………………………………………………………………………………………………………

c- What will happen when superimposing red, green and blue filter?

…………………………………………………………………………………………………………………

1. Why we use the primary colors ( red, green, blue) in TV and computer screens?

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1. a- What is color blindness? ………………………………………………………………………………………………………………..

…………………………………………………………………………………………………………………

b- List the three types of color blindness.

1) …………………………………………………………………………………………………

…………………………………………………………………………………………………….

2) …………………………………………………………………………………………………

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.3) …………………………………………………………………………………………………

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